

REMARKS

Before discussing the present invention and how the amended claims differ patentably from the cited prior art, it should be noted that on February 10, 2004, the undersigned and representatives of the Assignee herein, Curelight Ltd. met with Examiners Johnson and Gibson to discuss the prior art and the claims limited in the amendment filed November 24, 2003.

During the interview, Applicants provided reasons why certain features of the structure of the apparatus of the present invention distinguish over the cited prior art. The present amendment is submitted in response to the discussions during the interview of February 10, 2004. The courtesies extended by Examiners Johnson and Gibson are greatly appreciated.

The apparatus claims, as represented by new apparatus claim 230, provides for a self-supporting mechanical fixture for holding at least one light source in a fixed position spaced apart from the treatment area. The mechanical feature comprises securing means for securing the light source to the fixture and adjustment means for adjusting the distance or position of the light source from the treatment area. Support for this amendment is shown, for example, in Figure 1 and is described beginning on page 10, line 14 of the specification. As described therein, there is provided a fixture for holding and supporting a light source at an adjustable distance and direction relevant to the patient's treated skin area. The mechanical fixture

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allows horizontal, vertical and radial placement of the light source which is clearly spaced apart from the treatment area.

As indicated in section (b) of new claim 230, the light source emits light with a peak spectral emittance concentrated in at least one narrow spectral band with the peak spectral emittance in one of the narrow bands being in the range of 405 to 440 nm as described, for example, page 3, lines 17 – 23. The light source provides an illumination power at the treatment area of 10 to 500 mW/cm<sup>2</sup> as described in the specification at page 6, lines 16-19.

New generic apparatus claim 230 resulted in the cancellation of dependent claims previously pending in the application. Cancellation of the dependent claims address some of the technical objections to the claims set forth in the Office Action as discussed hereinafter.

New generic method claim 231 is directed to a method of treating a treatment area exhibiting a skin disorder. The claim positively recites use of the apparatus described in claim 230.

Entry of new claims 230 and 231 is therefore deemed proper and is respectfully requested.

Referring to the Office Action, several claims stand rejected on a provisional basis for obviousness-type double patenting over claims 1-30 of co-pending

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Application No. 10/098,592. Applicants will address this provisional application once the claims of either the present application or the cited co-pending application are allowed.

Page 2 of the Office Action sets forth several objections to the claims. The objections are deemed overcome in light of the cancellation of claim 116 as well as claims 140-144. In addition, claims 151 and 161 have been cancelled as well as claims 192 and 196. Accordingly, the objections to the claims set forth on page 2 of the Office Action are deemed overcome and withdrawal of the objections is deemed proper and is respectfully requested.

Page 3 of the Office Action sets forth a number of technical rejections of the claims under 35 USC Section 112. In response to these rejections, claim 107 has been amended in a manner which overcomes the rejection of the term "the patient". Claim 127 has been amended to provide structural language relating the claimed apparatus to the treatment area. Claim 182 has been canceled. In addition, claim 137 has been amended in a manner which is a proper limitation of claim 107. Finally, claim 159 has been canceled. Accordingly, the rejections under 35 USC Section 112 are deemed overcome and withdrawal of the rejections is deemed proper and is respectfully requested.

Several of the apparatus claims beginning with claim 107 have been rejected as anticipated by Eckhouse (U.S. Patent No. 5,620,478). The rejection is hereby traversed and reconsideration is respectfully requested.

As previously indicated, the present invention is directed to an apparatus for the treatment of a treatment area exhibiting a skin disorder and associated inflammation. In accordance with a key feature of the present invention, there is provided a self-supporting mechanical fixture for holding at least one light source in a fixed position spaced apart from the treatment area during the treatment of the skin disorder. The mechanical fixture comprises structural components which facilitate spaced apart treatment including securing means for securing the light source to the fixture and adjustment means for adjusting the distance or position of the light source from the treatment area in said spaced apart relationship.

Eckhouse discloses a therapeutic treatment method utilizing a spatially extended pulse light source such as a flashlight. As indicated at column 3, lines 45-51 and as clearly shown in Figure 1, the housing of the apparatus has an opening for being disposed adjacent a skin treatment area. Indeed, it is anticipated that a gel is used to couple the apparatus to the skin. The gel is preferably a high viscosity water based gel and is applied to the skin before treatment (column 13, lines 5-15).

Not only is the apparatus of the '478 Patent applied directly to the skin, but the apparatus is hand holdable and is therefore clearly not self-supporting. In this regard, reference is made to column 8, lines 44-58 which describes the device 10 as being provided as two units, a lightweight unit held by a physician using handle 13, with a hand-held unit containing flash lamp 14, filters 18 and iris 20 that together control the spectrum and the size of the exposed area. Power can be supplied to the

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device through a power supply provided in a separate box that is connected to the hand held unit by a flexible cable.

The proximity of the hand held unit to the skin is disadvantageous when compared with the apparatus of the present invention.

First, the reference device provides a significant limitation on the overall size of the treatment area because the device is held adjacent to the skin. Indeed, treatment areas of at least 200 cm<sup>2</sup> (see claim 127) cannot be achieved by operating the reference device because it is not spaced apart from the skin. In this regard, it is noted that claim 127 has not been rejected over the patent to Eckhouse.

A second disadvantage is that the device is a hand held device and is not therefore self-supporting. As explained at the interview on February 10, 2004, the self-supporting device of the present invention enables the apparatus to be set at a fixed position and provide treatment to the patient without direct hands-on involvement by medical personnel as would be required in the non-self-supporting device of Eckhouse. Thus, by employing the present apparatus, medical personnel can treat more than one patient at a time whereas treatment of multiple patients by the reference device appears to be difficult if not impossible.

It is therefore submitted that the apparatus claims set forth in the present application are neither anticipated by nor rendered obvious over Eckhouse.

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Claims 191, 193-195, 197-203, 206-208, 210, 223-226 and 229 stand rejected as anticipated by or obvious from Sigurdsson. The rejection is hereby traversed and reconsideration is respectfully requested.

New generic method claim 231 now incorporates use of the self-supporting mechanical fixture previously discussed in connection with new claim 230 to provide a treatment method with skin disorders. Sigurdsson discloses on page 257 a method of treating patients using three light sources which emit different emission spectrum. However, there is no teaching or suggestion of a self-supporting mechanical fixture which is spaced apart from the treatment area. Furthermore, there is no disclosure of a mechanical fixture comprising securing means for operatively securing the light source to the fixture and adjustment means for adjusting the distance and/or position of the light source from the treatment area. Since Applicants' method claims now require the employment of a particular apparatus; namely, the self-supporting mechanical fixture described above, it is clear that Sigurdsson does not teach or suggest an invention covered by Applicants' method of use claims. Withdrawal of the rejection is therefore deemed proper and is respectfully requested.

The bottom of page 7 of the Office Action sets forth a rejection of several of the apparatus claims as obvious over Eckhouse (U.S. Patent No. 5,620,478) in view of Whitehurst (U.S. Patent No. 5,843,143).

Whitehurst discloses an apparatus for the biological treatment of portwine stains, cancer cells and the removal of tattoos. The apparatus as shown in Figure 1 discloses a high intensity non-laser light source which includes a lamp and other components for generating a light beam output which exits the cap 13. The delivery of the light from the light source to the point of action is made through a fiber bundle 15 (see column 5, lines 22-31).

There is no teaching or suggestion in Whitehurst of a self-supporting mechanical fixture which includes the securing means and adjustment means necessary to enable the device to administer light to the treatment area in spaced apart relationship. In particular, there is no disclosure of the securing means and adjustment means required in the present claims. Accordingly, Whitehurst in combination with Eckhouse does not render the claimed invention obvious to one of ordinary skill in the art.

Claims 134, 135, 156, 157, 186 and 187 stand rejected as obvious over the combination of Eckhouse further in view of Diamantoupoulous (U.S. Patent No. 4,930,504). The rejection is hereby traversed and reconsideration is respectfully requested.

Claims 156, 157, 186 and 187 have been canceled. Claims 134 and 135 are directed to the use of diodes including LED's as the light source. Quite clearly, Applicants have not invented light emitting diodes as a light source. However, it is apparent that the secondary reference Diamantoupoulous does not teach or suggest

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a self-supporting mechanical fixture which includes the securing means and adjustment means necessary for providing spaced apart treatment to a skin disorder and associated inflammation. In this regard, the combination of Eckhouse and Diamantoupoulous (Eckhouse having been discussed above) does not lead one of ordinary skill in the art to the claimed invention and withdrawal of the rejection based on these references is deemed proper and is respectfully requested.

Claims 112, 139, 162 and 166 have been rejected as obvious over the combination of Eckhouse in view of Altshuler (U.S. Patent No. 6,273,884). The rejection is hereby traversed and reconsideration is respectfully requested. Claims 139, 162 and 166 have been canceled. Claim 112 is directed to the employment of a cooling means for removing excess heat from the treatment area.

Altshuler is directed to a cooling system for a photocosmetic device comprising a treatment head for use in close proximity to the patient's skin (paragraph 6). As indicated in paragraph 70, the treatment head is part of an assembly placed directly on the skin as shown in Figure 1. Accordingly, Altshuler does not describe a self-supporting mechanical fixture which is spaced apart from the treatment area and which provides securing means and adjustment means to enable the device to deliver light of particular emission spectrum to the treatment area while being spaced apart therefrom. It is therefore submitted that the combination of Eckhouse and Altshuler does not lead one of ordinary skill in the art to the claimed invention.



Claims 203, 223 and 229 stand rejected as obvious over the combination of Sigurdsson and Eckhouse. As previous indicated, method claim 231 positively recites the apparatus of claim 230 in order to provide the desired treatment. Since neither Sigurdsson nor Eckhouse as previously discussed teaches or suggests the claimed apparatus one of ordinary skill in the art would not be led to the invention as now claimed and therefore it is submitted that the rejection of these claims can not stand and withdrawal of the same is respectfully requested.

Claims 204 and 205 stand rejected as obvious over the combination of Sigurdsson, Eckhouse further in view of Wynne et al. (U.S. Patent No. 6,165,170). Wynne et al. has been stated to teach a touch screen display which is alleged to be able to be applied to the primary references. The rejection is hereby traversed and reconsideration is respectfully requested.

Applicants do not dispute that Wynne et al. discloses a display unit comprising a touch screen. However, a display unit touch screen does not lie at the heart of the presently claimed invention. As explained previously, neither Sigurdsson nor Eckhouse teach or suggest a self-supporting mechanical fixture of the structural components now set forth in Applicants' claims. It is therefore submitted that the rejection of claims 204 and 205 should be withdrawn and such action is respectfully requested.

Claims 209 and 227 stand rejected as obvious over the combination of Sigurdsson and Mendes et al. (U.S. Patent No. 5,259,380). Mendes et al. is cited to

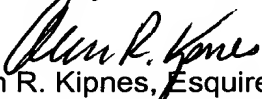
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disclose the use of red LED's for the treatment of skin disorders. However, there is no teaching or suggestion in Mendes alone or in combination with Sigurdsson of the apparatus and method set forth in Applicants' claims; and particularly the employment of the self-supporting mechanical fixture of the structural components necessary to carry out the claimed treatment.

In view of the foregoing, Applicants submit that the present application is in condition for allowance and early passage to issue is therefore deemed proper and is respectfully requested.

It is believed that no fee is due in connection with this matter. However, if any fee is due, it should be charged to Deposit Account No. 23-0510.

Respectfully submitted,

  
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